ISSN 1809-127X (online edition)
© 2011 *Check List* and Authors
Open Access | Freely available at *www.checklist.org.br*

Check List
Journal of species lists and distribution

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphisbaena miringoera Vanzolini, 1971 (Squamata: Amphisbaenidae): New state record

Tamí Mott [1*], César de Sá Carvalho Neto [2] and Kleber de Sá Carvalho Filho [2]

1 Universidade Federal de Alagoas, Instituto de Ciências Biológicas e da Saúde, Setor de Biodiversidade e Ecologia. Avenida Lourival Melo Mota s/n. CEP 57072-970. Maceió, AL, Brazil.
2 Foco Consultoria Ambiental Ltda., Rua D 425. CEP 68515-000. Parauapebas, PA, Brazil.
* Corresponding author. Email: *tamimott@hotmail.com*

ABSTRACT: *Amphisbaena miringoera* Vanzolini, 1971 is very small and slender amphisbaenid known, up to now, from five specimens obtained in Porto Velho, Rio Tapirapés, state of Mato Grosso, Brazil. Herein we report nine additional specimens (six females and three males) recently collected at Floresta Nacional de Carajás, Parauapebas municipality, state of Pará, extending its distribution in 530 km northeast of its type locality.

Amphisbaena miringoera Vanzolini, 1971 is a very small and slender amphisbaenid, diagnosable by the presence of two preclocal pores, 250-262 and 22-24 body and tail annuli respectively, and an evident dorsal sulcus. Its description was based on five specimens collected in July 1965 by Raimundo T. de Lima in Porto Velho, Rio Tapirapés, state of Mato Grosso, Brazil (10°47' S, 51°00' W). The type series of the species is housed at Museu de Zoologia da Universidade de São Paulo (MZUSP 13754-13758) and were inspected by one of us (TM). One specimen is broken (MZUSP 13757) and all other types are stiff, and fixed in awkward positions, making accurate measurements difficult. Further, sex was not assessed in the type series. Herein we report nine additional specimens (six females and three males, Table 1) of *A. miringoera*, recently obtained in Floresta Nacional de Carajás, municipality of Parauapebas, state of Pará, Brazil (Figure 1), extending its distribution in *ca*. 530 km northeast from its type locality, and representing the first record of this species in Pará. All specimens were collected at Floresta Nacional (FLONA) de Carajás from December 2010 to March 2011 (Permits: IBAMA/SISBIO/ICMBio 23663-4), when bulldozers were removing vegetation for mining activities (Vegetation Removal Permits: ICMBio 43/2010, ICMBio 01/2011). One male and two females were obtained at 06°02'25" S, 50°06'44" W, one male at 06°03'14" S, 50°11'44" W, one male and four females at 06°03'05" S, 50°76'40" W (DATUM WGS 84). Vouchers are housed at Coleção Zoológica de Vertebrados da Universidade Federal do Mato Grosso, Brazil (UFMT 9229-9237). FLONA Carajás is situated on Serra dos Carajás (800 m elevation), which is covered by rain forest. The climate is tropical hot and humid, "Aw" according to Köppen classification. The rainy season extends from November to May and alternates with dry season from June to October. The average annual rainfall is 2116 mm and temperature ranges from 20°C to 28°C (Silva *et al*. 1986). Vanzolini (1971) did not mention whether *A. miringoera* has an autotomic site in its tail, although, the same author (Vanzolini 2002) considered, based on the same type series specimens, which the species lacks of tail autotomy. In fact, the provided photo of the specimen's tail (Vanzolini 1971: plate 1, paratype MZUSP 13758) shows a constriction on annulus 7th that could suggest that tail autotomy may occur in the species. We found five specimens with autotomic tails on anulli 7th or 8th (Table 1). With these additional specimens, the range of the highest number of body annuli for *A. miringoera*, changes from 262 to 264, and tail autotomy certainly may occur on annulus 7th or 8th. Vanzolini (1971) when describing *A. miringoera* mentioned that the most closest related to it seems to be *A. mitchelli.* We found them in sympatry and also in syntopy in the studied area, and further studies are taking place to investigate their phylogenetic relationships. By following bulldozers during the vegetation suppression of an area, fossorial fauna tend to emerge and nowadays we know that many species of amphisbaenians may have a much wider distribution that previously thought.

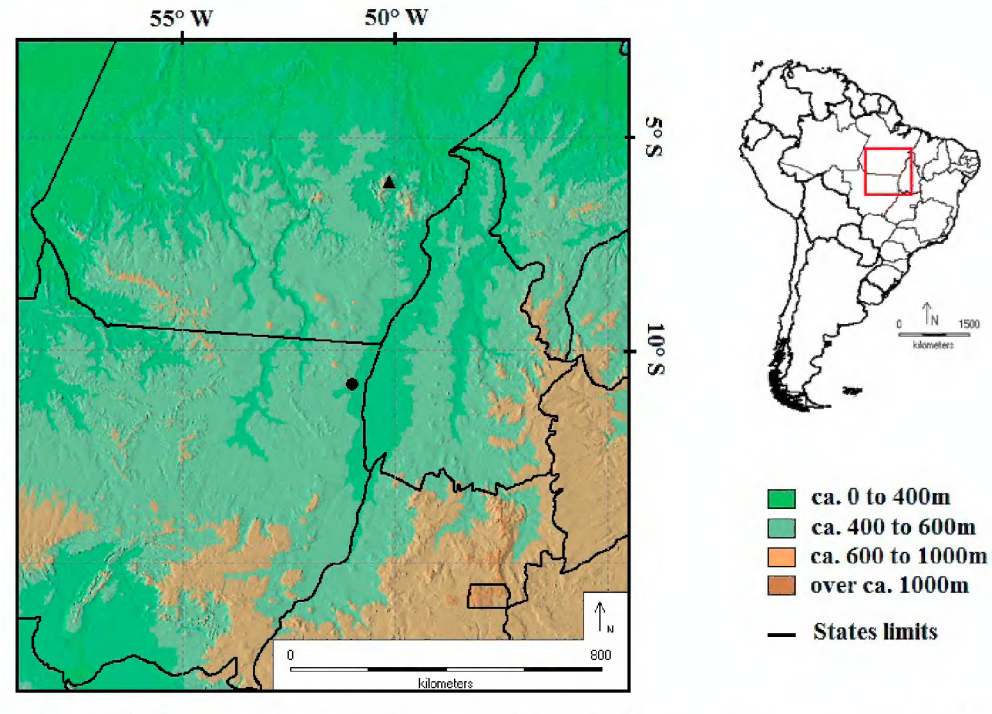

FIGURE 1. Geographic distribution of *Amphisbaena miringoera* Vanzolini 1971. Circle represents the type-locality at Porto Velho, Rio Tapirapés, MT; triangle represents new state record for the species at Floresta Nacional dos Carajás, Parauapebas municipality, state of Pará, Brazil (06°02'54" S, 50°10'29" W, DATUM WGS84).

Table 1. *Ampisbaena miringoera* measurements and scale counts. MZUSP = Museu de Zoologia da Universidade de São Paulo, UFMT = Coleção Zoológica de Vertebrados da Universidade Federal do Mato Grosso. MZUSP 13756 = holotype, MZUSP 13754, 13755, 13757, 13758 = paratypes and data were obtained from Vanzolini (1971). * = data is absent from the literature.

INSTITUTION NUMBER	SEX	LENGHT (MM)		ANNULI		SEGMENTS	
		BODY	TAIL	BODY	TAIL (AUTOTOMIC ANNULUS)	DORSAL	VENTRAL
MZUSP13754	*	66	7	250	23	12	12
MZUSP13755	*	110	11	262	24	12	14
MZUSP13756	*	111	11	256	22	12	14
MZUSP13757	*	*	*	*	22	12	15
MZUSP13758	*	142	13	256	24	12	14
UFMT9229	F	122	14	262	21 (7)	12	12
UFMT9230	M	127	5	263	8	12	12
UFMT9231	F	135	14	262	21 (7)	12	12
UFMT9232	M	124	12	259	23 (7)	12	12
UFMT9233	F	95	3	260	7	12	12
UFMT9234	F	113	4	261	7	12	12
UFMT9235	F	122	13	264	20 (7)	12	14
UFMT9236	M	126	5	256	7	12	12
UFMT9237	F	136	4	262	7	12	14

Acknowledgments: We thank Vale S.A. for financial support for this work, ICMBIO and Frederico Drummond Martins for collecting permits at Floresta Nacional de Carajás, Marcos André de Carvalho for allowing us to access specimens housed at Coleção Zoológica de Vertebrados da Universidade Federal do Mato Grosso.

Literature Cited

Silva, M.F.F., N.L. Menezes, P.B. Cavalcante and C.A. Joly. 1986. Estudos botânicos: Histórico, atualidade e perspectivas; p. 169-187 *In* J.M.G. de Almeida Jr. (ed.). *Carajás*: *desafio político, ecologia e desenvolvimento*. Brasília: CNPq-Editora Brasiliense.

Vanzolini, P.E. 1971. New Amphisbaenidae from Brasil (Sauria). *Papéis Avulsos de Zoologia, São Paulo* 24(14): 191-195.

Vanzolini, P.E. 2002. An aid to the identification of the South American species of *Amphisbaena* (Squamata, Amphisbaenidae). *Papéis Avulsos de Zoologia, São Paulo* 42(15): 351-362.

Received: June 2011
Last Revised: July 2011
Accepted: August 2011
Published online: September 2011
Editorial responsibility: Paula H. Valdujo